

THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN SECONDARY EDUCATION EXAMINATION

762

EDUCATIONAL RESEARCH, MEASUREMENT AND
EVALUATION

Time: 3 Hours

Wednesday, 04th May 2016 a.m.

Instructions

1. This paper consists of sections A and B.
2. Answer **all** questions in section A and **four (4)** questions from section B.
3. Questions **11** is **compulsory**.
4. Section A carries 40 marks and section B carries 60 marks.
5. Cellular phones are **not** allowed in the examination room.
6. Non-programmable calculators may be used.
7. Write your **Examination Number** on every page of your answer booklet(s).

SECTION A (20 Marks)

Answer **all** questions in this section.

1. What effect would each of the following have on the reliability of the test score?
 - (a) Reducing the number of the items in a test.
 - (b) Changing from subjective to objective test items of the same content.
 - ☒ (c) Occurrence of cheating opportunities.
 - ☒ (d) Enough time limits for doing a given test.
2. Briefly describe four common instruments which are used in assessing students' achievement.
3.
 - (a) Explain four uses of examinations for classroom teachers.
 - (b) Outline two importance of portfolio used to assess students' achievement.
- ☒ 4. State four uses of correlation coefficient in school settings.
5.
 - (a) What is the difference between frequency and cumulative frequency?
 - ☒ (b) Write down three merits of the use of mean.
- ☒ 6. Analyse four roles of criterion referenced measurement in teaching and learning process.
7.
 - (a) Briefly explain how students' related factors can affect the reliability of test scores; and then write down four such related factors.
 - ☒ (b) Describe four factors that can help to avoid inconsistency in measuring and evaluating learning outcomes.
8.
 - (a) Distinguish between standardization of test scores and ranking of test scores.
 - (b) Write down three descriptive measures which describe the average.
9.
 - (a) What is an action research?
 - (b) Briefly explain three purposes of doing action research in education setting.
10. What is the difference between assessment and evaluation in teaching/learning situation?

SECTION B (60 Marks)

Answer four (4) questions from this section. Question 11 is compulsory.

11. (a) Give three reasons why z-scores are used to describe the scores of a distribution.
- (b) Consider the following test scores; 56, 54, 52, 50, 65, 67, 72, 81, 84 and 86.
- (i) Calculate the z-score for candidates who scored 50 and 86 on the test. (Write your answer in two decimal places).
- (ii) Calculate T_{50} and T_{86} .
12. (a) Provide comprehensive descriptions of the two types of research approach.
- (b) Mention four importance of a research proposal.
13. (a) Explain five purposes of educational evaluation being carried out from time to time.
- (b) Write down five reasons for assessing students' achievement.
14. The following are students' response from Geography examination question number 6 where the correct response was C.

Item alternatives	A	B	C	D	E
Upper ten (10)	0	0	6	2	2
Lower ten (10)	0	3	2	3	2

- (a) Calculate;
- (i) Item difficult using the facility index formula.
- (ii) Discrimination index.
- (b) Explain how the curriculum planners can use the data obtained from item analysis.
15. Account for four scales of measurement as used in educational research measurement and evaluation.
16. (a) Write down five characteristics of norm referenced measurement.
- (b) Explain five uses of criterion reference testing.
17. Explain six strategies that a teacher can use to overcome the problem of cheating in the examination room.
18. (a) State the use of the results and the time for administration of the following types of evaluation;
- (i) Diagnostic
- (ii) Placement.
- (b) Explain six purposes of testing.